

In Response

Toward Dialogue with Cognitive Psychology

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Smith (1994) tried to establish a dialogue between cognitive psychology and behavior analysis first by explaining to cognitive psychologists the strengths of behavior analysis and second by explaining to behavior analysts the role of cognitive psychology in accounting for behavior. Lamal (1995) calls the first effort “sophisticated” but the second “unconvinc[ing].” Let me try the second explanation again.

Skinner (1953) recognized that a complete account of behavior would not only relate complex environmental stimuli to complex behavioral patterns by means of molar principles but would also provide a reductive account of the molar principles themselves. This reductive account would in turn provide targets for physiological explanation.

Skinner built his philosophy of radical behaviorism on the assumption that such a reductive program could succeed without help from cognitive theory. Ferster and Skinner (1957) attempted to support this assumption by accounting for schedule effects on the basis of elementary behavioral principles (reinforcement, extinction, stimulus control, etc.) that in turn presented plausible targets for physiological analysis. Had their account been successful, it would have provided empirical support for the key assumption that cognitive theory is unnecessary for a complete account of behavior.

Alas, neither this nor any other reductive analysis of the kind has been successful (see Marr, 1984; Zeiler, 1984). Progress in behavior analysis has been limited to the molar level, where the field now focuses its attention. Hence, by their actions, if not by their words, behavior analysts have conceded that they cannot account for molar principles of behavior on the basis of elementary behavioral principles. This is tantamount to abandoning radical behaviorism, which is distinctive among forms of behaviorism for its reliance upon empirical (rather than methodological or linguistic) support.

Lamal (1995) rejects cognitive explanations on the grounds that physiology is the preferred science for reductive explanations of behavior. But this response misses what is at issue. Virtually everyone agrees that physiological processes ultimately underlie behavioral regularities. The question is whether an analysis of behavior must pass through a cognitive level of explanation in order to connect with physiological analysis. Given the collapse of the reductive component of the behavior-analytic program, there is now little (if any) reason to say the cognitive level is superfluous to a complete account of behavior. Hence, there is a need for sustained dialogue between cognitive psychology and behavior analysis.

REFERENCES

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